ASEM 6300M Panel Monitors

Bulletin Number 6300M

Allen-Bradley
by ROCKWELL AUTOMATION

User Manual

Original Instructions

Important User Information

Read this document and the documents listed in the additional resources section about installation, configuration, and operation of this equipment before you install, configure, operate, or maintain this product. Users are required to familiarize themselves with installation and wiring instructions in addition to requirements of all applicable codes, laws, and standards.

Activities including installation, adjustments, putting into service, use, assembly, disassembly, and maintenance are required to be carried out by suitably trained personnel in accordance with applicable code of practice.

If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

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Throughout this manual, when necessary, we use notes to make you aware of safety considerations.

WARNING: Identifies information about practices or circumstances that can cause an explosion in a hazardous environment, which may lead to personal injury or death, property damage, or economic loss.

ATTENTION: Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attentions help you identify a hazard, avoid a hazard, and recognize the consequence.

IMPORTANT Identifies information that is critical for successful application and understanding of the product.

These labels may also be on or inside the equipment to provide specific precautions.

SHOCK HAZARD: Labels may be on or inside the equipment, for example, a drive or motor, to alert people that dangerous voltage may be present.

BURN HAZARD: Labels may be on or inside the equipment, for example, a drive or motor, to alert people that surfaces may reach dangerous temperatures.

ARC FLASH HAZARD: Labels may be on or inside the equipment, for example, a motor control center, to alert people to potential Arc Flash. Arc Flash will cause severe injury or death. Wear proper Personal Protective Equipment (PPE). Follow ALL Regulatory requirements for safe work practices and for Personal Protective Equipment (PPE).

The following icon may appear in the text of this document.

Identifies information that is useful and can help to make a process easier to do or easier to understand.

Table of Contents

This user manual provides procedures to install, connect, operate, and troubleshoot your ASEM™ 6300M panel monitor.

A general knowledge of automation technology is needed to understand and follow the instructions in this publication.

Knowledge of monitors, personal computers (PCs), and the Microsoft Windows® operating system (OS) is required to understand and follow the instructions in this publication.

Summary of Changes

This publication contains the following new or updated information. This list includes substantive updates only and is not intended to reflect all changes.

Topic	Page
Added optional remote video link (RVL) receiver and optional RVL transmitter publication links within Additional Resources table	6
Updated accessories that are related to RVL within Accessories	12
Inclusive terminology change to “recommended” within Display Resolution Value section	25

Additional Resources

These documents contain additional information concerning related products from Allen Bradley. You can view or download publications at rok.auto/literature.

Resource	Description
ASEM 6300M Panel Monitors Installation Instructions, publication 6300M-IN001	Provides basic installation guidelines and instructions for ASEM 6300M panel monitors.
ASEM 6300 Industrial Computer Specifications Technical Data, publication IC-TD003	Provides technical specifications about the ASEM 6300M industrial monitors.
ASEM 6300 Remote Video Link (RVL) Receiver Installation Instructions, publication 6300V-IN004	Provides basic installation guidelines and instructions for ASEM 6300V RVL receivers.
ASEM 6300 Remote Video Link (RVL) Transmitter Installation Instructions, publication 6300V-IN005	Provides basic installation guidelines and instructions for ASEM 6300V RVL transmitters.
ASEM 6300 Remote Video Link (RVL) Receiver and Transmitter User Manual, publication 6300V-UM001	Provides detailed instruction on the operation and troubleshooting for ASEM 6300V RVL receivers and RVL transmitters.
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Safety Guidelines for the Application, Installation, and Maintenance of Solid-State Controls, publication SG-1.1	Provides general guidelines for the application, installation, and maintenance of solid-state control.
Product Certifications website, rok.auto/certifications	Provides declarations of conformity, certificates, and other certification details.
EtherNet/IP™ Network Devices User Manual, publication ENET-UM006	Describes how to configure and use EtherNet/IP devices to communicate on the EtherNet/IP network.
Ethernet Reference Manual, publication ENET-RM002	Describes basic Ethernet concepts, infrastructure components, and infrastructure features.
System Security Design Guidelines Reference Manual, publication SECURE-RM001	Provides guidance on how to conduct security assessments, implement Rockwell Automation products in a secure system, harden the control system, manage user access, and dispose of equipment.
UL Standards Listing for Industrial Control Products, publication CMPNTS-SR002	Assists original equipment manufacturers (OEMs) with construction of panels, to help ensure that they conform to the requirements of Underwriters Laboratories.
American Standards, Configurations, and Ratings: Introduction to Motor Circuit Design, publication IC-AT001	Provides an overview of American motor circuit design based on methods that are outlined in the NEC.
Industrial Components Preventive Maintenance, Enclosures, and Contact Ratings Specifications, publication IC-TD002	Provides a quick reference tool for Allen-Bradley® industrial automation controls and assemblies.
Safety Guidelines for the Application, Installation, and Maintenance of Solid-state Control, publication SG1.1	Designed to harmonize with NEMA Standards Publication No. ICS 1.1-1987 and provides general guidelines for the application, installation, and maintenance of solid-state control in the form of individual devices or packaged assemblies incorporating solid-state components.

Overview

Standard Profile, Stainless Steel Bezel

Low Profile, Aluminum Bezel

Low Profile, Aluminum-glass True Flat Bezel

The ASEM™ 6300M panel monitor family is available in various display sizes and resolutions. There are options of either standard or low profile bezel units.

IP65 (model dependent) environmental protection makes ASEM 6300M panel monitors an excellent match for wash-down applications such as food processing and life sciences.

Some ASEM 6300M panel monitors have long-distance capabilities, which means they can be connected to a personal computer (PC) where both are up to 100 m (328 ft) apart.

ASEM 6300M panel monitors offer the following features:

- Available in standard and low profile bezels, with the latter available in aluminum, aluminum glass True Flat, and stainless steel True Flat
- Available in standard and widescreen formats
- Analog resistive or projected capacitive (PCAP) touch screens, the latter for multi-touch operation
- Available in display sizes between 8.4...24 inches
- Various resolutions to include: FHD, VGA, SVGA, SXGA, AND XGA
- Wide angle LCD viewing with light-emitting diode (LED) backlight technology
- Standard panel monitors offer the following:
  - Two video ports, DVI-D and DisplayPort
  - One USB HUB, Type B port, and up to three USB 2.0 Type A ports
    - Certain models offer a USB 2.0 port on the front bezel (see Table 1 on page 8)
- Long-distance panel monitors offer the following:
  - One remote video link (RVL) port
  - Up to five USB 2.0 ports
    - Certain models offer a USB 2.0 port on the front bezel (see Table 1 on page 8)
- 110/240V AC input power standard, 24V DC optional
- IP65 rating on panel monitors with aluminum, aluminum True Flat, and aluminum glass True Flat bezels
- IP66K and IP69K (model dependent) ratings on panel monitors with stainless steel True Flat bezels

Catalog Numbers

This publication is applicable to ASEM 6300M panel monitors listed in Table 1

See the product label attached on the side of your panel monitor to identify your specific catalog number.

Table 1 - Catalog Numbers

Catalog Number	Display Size	Touch Screen Type	Aspect Ratio	Resolution (W x H)	Luminance cd/m^2	Bezel Type	USB Port on Front Bezel	Long Distance Model
6300M-xxxBAPS...	8.4	Resistive	4:3	800x600, SVGA	400	Aluminum	Yes	No
6300M-xxxDAPS...								Yes
6300M-xxxBBPS...						Aluminum True Flat		No
6300M-xxxDBPS...								Yes
6300M-xxxAAPS...	10.1	Resistive	16:9	1280x800, WXGA	400	Aluminum	No	No
6300M-xxxCAPS...								Yes
6300M-xxxAXPS...						Stainless Steel True Flat, IP69K Rating		No
6300M-xxxCXPS...								Yes
6300M-xxxACPS...		PCAP	16:9	1280x800, WXGA	400	Aluminum Glass True Flat	No	No
6300M-xxxCCPS...								Yes
6300M-xxxBAPS...	10.4	Resistive	4:3	800x600, SVGA	400	Aluminum	Yes	No
6300M-xxxDAPS...								Yes
6300M-xxxBBPS...						Aluminum True Flat		No
6300M-xxxDBPS...								Yes
6300M-xxxBAPS...	12.1	Resistive	4:3	1024x768, XGA	600	Aluminum	Yes	No
6300M-xxxDAPS...								Yes
6300M-xxxBBPS...						Aluminum True Flat		No
6300M-xxxDBPS...								Yes
6300M-xxxBSPS...						Stainless Steel True Flat, IP69K Rating	No	No
6300M-xxxDSPS...								Yes
6300M-xxxAAPS...			16:9	1280x800, WXGA	400	Aluminum	No	No
6300M-xxxCAPS...								Yes
6300M-xxxAXPS...						Stainless Steel True Flat, IP69K Rating		No
6300M-xxxCXPS...								Yes
6300M-xxxACPS...		PCAP	16:9b	1280x800, WXGA	400	Aluminum Glass True Flat	No	No
6300M-xxxCCPS...								Yes
6300M-xxxBAPS...	15.0	Resistive	4:3	1024x768, XGA	500	Aluminum	Yes	No
6300M-xxxDAPS...								Yes
6300M-xxxBBPS...						Aluminum True Flat		No
6300M-xxxDBPS...								Yes
6300M-xxxBSPS...						Stainless Steel True Flat, IP69K Rating	No	No
6300M-xxxDSPS...								Yes
6300M-xxxAAPS...	15.6	Resistive	16:9	1920x1080, FHD	400	Aluminum	No	No
6300M-xxxCAPS...								Yes
6300M-xxxAXPS...						Stainless Steel True Flat, IP69K Rating		No
6300M-xxxCXPS...								Yes
6300M-xxxACPS...		PCAP	16:9	1920x1080, FHD	400	Aluminum Glass True Flat	No	No
6300M-xxxCCPS...								Yes

Table 1 - Catalog Numbers (Continued)

Catalog Number	Display Size	Touch Screen Type	Aspect Ratio	Resolution (W x H)	Luminance cd/m^2	Bezel Type	USB Port on Front Bezel	Long Distance Model
6300M-xxxBAPS...	17.0	Resistive	4:3	1280x1024, SXGA	350	Aluminum	Yes	No
6300M-xxxDAPS...								Yes
6300M-xxxBBPS...						Aluminum True Flat		No
6300M-xxxDBPS...								Yes
6300M-xxxBSPS...						Stainless Steel True Flat, IP69K Rating	No	No
6300M-xxxDSPS...								Yes
6300M-xxxAAPS...	18.5	Resistive	16:9	1920x1080, FHD	400	Aluminum	No	No
6300M-xxxCAPS...								Yes
6300M-xxxAXPS...						Stainless Steel True Flat, IP69K Rating		No
6300M-xxxCXPS...								Yes
6300M-xxxACPS...		PCAP	16:9	1920x1080, FHD	500	Aluminum Glass True Flat	No	No
6300M-xxxCCPS...								Yes
6300M-xxxBAPS...	19.0	Resistive	4:3	1280x1024, SXGA	300	Aluminum	Yes	No
6300M-xxxDAPS...								Yes
6300M-xxxBBPS...						Aluminum True Flat		No
6300M-xxxDBPS...								Yes
6300M-xxxBSPS...						Stainless Steel True Flat, IP69K Rating	No	No
6300M-xxxDSPS...								Yes
6300M-xxxAAPS...	21.5	Resistive	16:9	1920x1080, FHD	300	Aluminum	No	No
6300M-xxxCAPS...								Yes
6300M-xxxAXPS...						Stainless Steel True Flat, IP69K Rating		No
6300M-xxxCXPS...								Yes
6300M-xxxACPS...		PCAP	16:9	1920x1080, FHD	300	Aluminum Glass True Flat	No	No
6300M-xxxCCPS...								Yes
6300M-xxxAAPS...	24.0	Resistive	16:9	1920x1080, FHD	300	Aluminum	No	No
6300M-xxxCAPS...								Yes
6300M-xxxAXPS...						Stainless Steel True Flat, IP69K Rating		No
6300M-xxxCXPS...								Yes
6300M-xxxACPS...		PCAP	16:9	1920x1080, FHD	300	Aluminum Glass True Flat	No	No
6300M-xxxCCPS...								Yes

Peripheral Connections

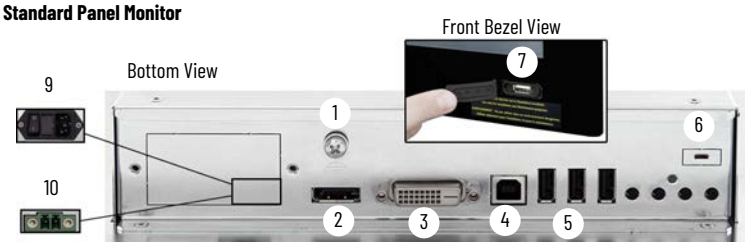
IMPORTANT To comply with EN 61326-1, all cable types must be shielded and must be used only indoors, and USB cables must be less than 3 m (9.84 ft) in length.

IMPORTANT Before connecting or disconnecting peripheral cables from I/O ports, verify that you are in a non-hazardous location.

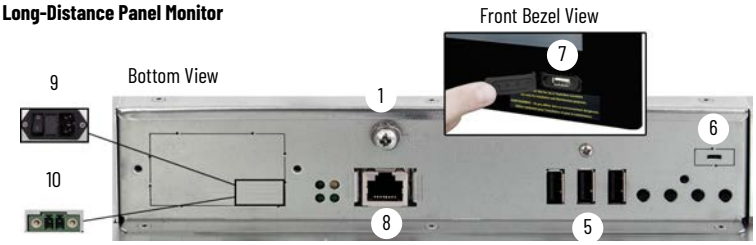
The front USB port on your panel monitor is not for use in hazardous locations.
Only use the front USB port for installation and maintenance purposes.

Table 2 - Peripheral Connections

Standard Panel Monitor



Long-Distance Panel Monitor



Note No.	Cable Type	Required Attribute
1	Earth Ground Screw	–
2	DisplayPort	Shielded
3	DVI-D	
4	USB Hub, Type B	
5	USB 2.0, Type A (quantity of 3)	
6	USB 2.0 (1)	
7	USB 2.0 (2)	
8	Remote Video Link (RVL) (3) Port	
9	DC Powered Panel Monitors: DC 2-pole Connector	Unshielded
10	AC Powered Panel Monitors: AC Power	

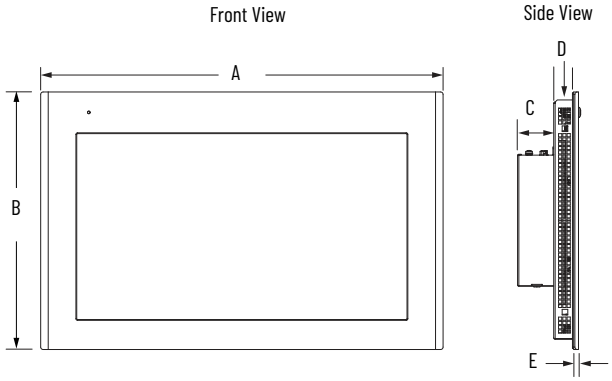
(1) Optional feature.
(2) Select catalog numbers offer a USB 2.0 port on the front bezel. See Table 1 on page 8 for a list of catalog numbers with this feature.
IMPORTANT: This USB port is not for use in hazardous locations.
IMPORTANT: The USB port cover must be closed properly for IP65 protection.
(3) The RVL port requires a specific Ethernet cable type. See Table 4 on page 12 for applicable cables.

Approximate Dimensions

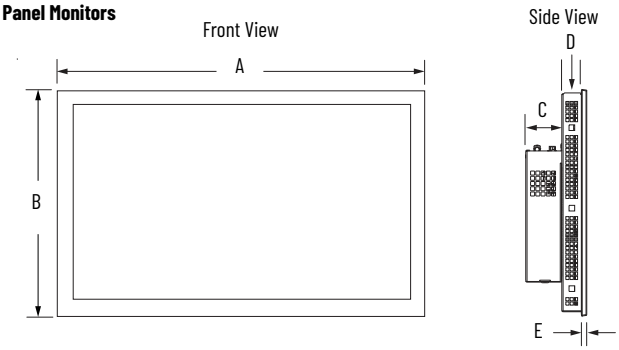
Dimensions are shown in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

Table 3 - Approximate Dimensions [mm (in.)]

16:9 and 16:10 Aspect Ratio Panel Monitors



4:3 and 5:4 Aspect Ratio Panel Monitors



Display Size	Aspect Ratio	Bezel Type	Dimensions				
			A	B	C	D	E
8.4	4:3	Aluminum	250 (9.84)	210 (8.27)	45 (1.77)	19 (0.75)	5 (0.2)
		Aluminum True Flat					
10.1	16:10	Aluminum	262.5 (10.33)	181 (7.13)	45 (1.77)	17.5 (0.69)	4.5 (0.18)
		Aluminum glass True Flat					
		Stainless steel	278.3 (10.96)	196.7 (7.74)	45 (1.77)	17.5 (0.69)	6 (0.24)
10.4	4:3	Aluminum	300 (11.81)	245 (9.65)	45 (1.77)	19 (0.75)	5 (0.2)
		Aluminum True Flat					
12.1	16:10	Aluminum	308 (12.13)	210 (8.27)	45 (1.77)	17.5 (0.69)	4.5 (0.18)
		Aluminum glass True Flat					
	4:3	Aluminum	335 (13.19)	270 (10.63)	45 (1.77)	19 (0.75)	5 (0.2)
		Stainless steel					
15.0	4:3	Aluminum	390 (15.35)	315 (12.4)	45 (1.77)	19 (0.75)	6 (0.24)
		Stainless steel	398 (15.67)				
15.6	16:9	Aluminum	395 (15.55)	245 (9.65)	45 (1.77)	25 (0.98)	4.5 (0.18)
		Aluminum glass True Flat					6 (0.24)
17.0	5:4	Aluminum	455 (17.91)	355 (13.98)	45 (1.77)	21 (0.83)	6 (0.24)
		Stainless steel					
18.5	16:9	Aluminum	461 (18.15)	282 (11.1)	45 (1.77)	25 (0.98)	6 (0.24)
		Aluminum glass True Flat					
19.0	5:4	Aluminum	490 (19.29)	388 (15.28)	45 (1.77)	21 (0.83)	6 (0.24)
		Stainless steel					
21.5	16:9	Aluminum	528 (20.79)	319 (12.56)	45 (1.77)	25 (0.98)	6 (0.24)
		Aluminum glass True Flat					
24.0	16:9	Aluminum	584 (23.00)	352 (13.86)	45 (1.77)	25 (0.98)	6 (0.24)
		Aluminum glass True Flat					

Accessories

Various accessories are available for your ASEM 6300M panel monitor.

See Table 1 to identify which catalog numbers are long-distance models.

Table 4 - Remote Video Link (RVL) Cables for Long-Distance Panel Monitors

Description		Cable Length	Min Bend Radius	Cat. No. 6300V-
Cat 5e Shielded and Foiled with Unshielded Twisted Pairs (SF/UTP) type	for fixed laying	15 m (49.2 ft)	50.4 mm (2 in.)	15RVLFIXED
		20 m (65.6 ft)		20RVLFIXED
		30 m (98.4 ft)		30RVLFIXED
		40 m (131.2 ft)		40RVLFIXED
		50 m (164 ft)		50RVLFIXED
Cat 5e SF/UTP type	for not guided flex laying	5 m (16.4 ft)	94.5 mm (3.72 in.)	5RVLFLEX
		10 m (32.8 ft)		10RVLFLEX
		15 m (49.2 ft)		15RVLFLEX
		20 m (65.6 ft)		20RVLFLEX
		25 m (82 ft)		25RVLFLEX
		30 m (98.4 ft)		30RVLFLEX
		35 m (114.8 ft)		35RVLFLEX
		40 m (131.2 ft)		40RVLFLEX
		45 m (147.6 ft)		45RVLFLEX
		50 m (164 ft)		50RVLFLEX
Cat 6a S/FTP type	for fixed laying	100 m (328 ft)	90 mm (3.54 in.)	100RVLFIXED

Table 5 - Adapters

Description	Cat. No.
DisplayPort™ to VGA active adapter	6200V-DPVGA2
DisplayPort to DVI-D active adapter	6200V-DPDVI2
DisplayPort to HDMI active adapter	6200V-DPHDMI4K

For optimal performance, use only Allen Bradley-approved active DisplayPort adapters.

Table 6 - Other Cables

Description	Cable Length	Cat. No.
DisplayPort to DisplayPort cable	2 m (6.5 ft)	6200V-DPCBL2M
DVI cable	2 m (6.5 ft)	6200V-DVICBL2M
USB to USB touch screen cable	2 m (6.5 ft)	6200V-USBCBL2M
Cable kit: DVI and USB 2.0 (USB A type to USB B type)	DVI: 5 m (16.4 ft) USB 2.0: 5 m (16.4 ft)	6300V-5MDVIUSB

Table 7 - RVL Components

Description	Cat. No.
ASEM RVL Receiver	6300V-RVLDV-RX
ASEM RVL Transmitter	6300V-RVLDV-TX

Prepare for Installation

Follow the requirements and procedures within this section to help you plan and prepare for installation of your ASEM™ 6300M panel monitor.

Unpack the Monitor

Before you unpack the monitor, inspect the shipping carton for damage. If damage is visible, immediately contact the shipper and request assistance. Otherwise, proceed with unpacking.

Keep the original packing material in case the panel monitor must be you must returned for repair or transported to another location.

Your panel monitor ships with the following items.

Table 8 - Parts List

Item	Description
Hardware	• Mounting clips (for panel mounting) • DC power connector assembly kit (for DC powered panel monitors only)
Document	• For non-hazardous applications: 6300M Industrial Panel Monitors Installation Instructions, publication 6300M-IN001 • For hazardous locations: 6300M Panel Monitors for Hazardous Locations Installation Instructions, publication 6300M-IN002

Compliance

UL/cUL Mark Compliance

Equipment with the UL/cUL mark complies with the requirements of UL 61010-1, UL 61010-2-201, CSA C22.2 No. 61010-1, and CSA C22.2 No. 61010-2-201. A copy of the certificate of compliance is available at rok.auto/certifications.

European Union Directive Compliance

This equipment meets the European Union Directive requirements when installed within the European Union or EEA regions and have the CE marking. A copy of the declaration of the conformity is available at rok.auto/certifications.

ATTENTION: This equipment is intended to operate in an industrial or control room environment, which uses some form of power isolation from the public low-voltage mains. Some computer configurations cannot comply with the EN 61000-3-2 Harmonic Emissions standard as specified by the EMC Directive of the European Union.
All I/O cables must be used only indoors.

Environment Information

ATTENTION: This equipment is intended for use in a Pollution Degree 2 industrial environment, in overvoltage Category II applications (as defined in IEC 60664-1), at altitudes up to 2000 m (6561 ft) without derating.
This equipment is considered Group 1, Class A industrial equipment according to IEC/EN 61326-1. Without appropriate precautions, there can be potential difficulties with electromagnetic compatibility in other environments due to conducted as well as radiated disturbance.

In addition to this publication, see the following:

- Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1, for more installation requirements.
- UL 50, CSA C22.2 No. 94.1, and IEC 60529, as applicable, for explanations of the degrees of protection provided by enclosures.

Environment Requirements

Follow these environment requirements to make sure that your 6300M panel monitor provides service with excellent reliability.

- Your installation site:
  - must have sufficient power,
  - must be indoors
  - must be in an non-hazardous location except where the monitor is rated for hazardous locations (see Hazardous Locations on page 15), and
  - must not expose your panel PC to direct sunlight.
- The ambient air temperature range must be between 0…50 °C (32…122 °F), and have a temperature code of T5.
  - The surrounding air temperature must not exceed this maximum temperature, especially when mounted in an enclosure.

IMPORTANT Your ASEM™ 6300M panel monitor can operate at a range of extremes. However, the life span of any electronic device is shortened if you continuously operate the monitor at its highest rated temperature, which includes the touch screen and LCD panel.

- Your 6300M panel monitor can be stored in a surrounding air temperature range of -5…+60 °C (23…140 °F).
- The relative humidity of the ambient air must be 20…90% noncondensing at 0…40 °C (32…104 °F), and 20…80% noncondensing at 41…50 °C (105…122 °F).'

Hazardous Locations

IMPORTANT Your ASEM 6300M DC powered panel monitors for hazardous locations are intended only for USA and Canada applications. These monitors are suitable for use in Class I, Division 2 Groups A, B, C, D hazardous locations, or only in non-hazardous locations, with a temperature code of T5.

IMPORTANT AC powered panel monitors cannot be used in hazardous locations.

WARNING: Explosion Hazard

- Substitution of any components can impair suitability for hazardous locations.
- This equipment is an open-type device and is meant to be installed in an enclosure suitable for the environment such that the equipment is only accessible with the use of a tool.
- Do not disconnect equipment while the circuit is live or unless the area is known to be free of ignitable concentrations.
- Peripheral equipment must be suitable for the location where it is used.
- The front USB port on 6300M-xxxBA and 6300M-xxxBB monitors is not for use in hazardous locations. Only use that front USB port for installation and maintenance purposes.
- In the U.S., all wiring must be in accordance with Class I, Division 2 wiring methods of Article 501 of the National Electrical Code, and in accordance with the authority having jurisdiction.
- In Canada, all wiring must be in accordance with Section 18-1J2 of the Canadian Electrical Code, and in accordance with the authority having jurisdiction.

Restricted Access Locations

For hazardous locations, verify that restricted access locations meet these conditions for your panel monitor:

- Access is gained only by service personnel or by users who have been instructed on the reasons for restrictions to a location and about any precautions to be taken.
- Access is by using a tool, a lock and key, or other means of security controlled by the authority responsible for the location.

Installation Requirements

DC Power Supply Requirements

Follow these DC power supply requirements for your 6300M DC powered panel monitor.

- The panel monitor must be powered with a voltage of 24V DC (18...32V DC SELV input voltage range).
- The nominal output power must be 25% larger than the rated power of your panel monitor.
- The output voltage rise time has to be less than 100 ms.
- Consider the working temperature and the thermal derating of the power supply.
- The inrush current of the panel monitor cannot exceed a peak current of 10 A and a pulse width time of 400 µs..

IMPORTANT In environments with electrical noise, use an isolated power source and electromagnetic compatibility (EMC) filter to help provide a reliable touch screen operation.
Use an analog resistive touch screen where you anticipate EMC noise.

Power Consumption

The following table shows the power consumption in watts of your 6300M panel monitor.

See the product label on the back side of your panel monitor to determine its catalog number.

Panel Monitor Display Information			Power Consumption (Watts), Max (1)	
Display Size	Resolution (W x H)	Aspect Ratio	6300M-xxxB	6300M-xxxD
12.1	1024 x 768, XGA	4:3	18.1	22.7
	1280 x 800, WXGA	16:10	13.2	18.4
15	1024 x 768, XGA	4:3	15.3	20.5
15.6	1920 x 1080, FHD	16:9	25.9	30.3
17	1280 x 1024, SXGA	5:4	22.8	27.7
18.5	1920 x 1080, FHD	16:9	28.2	33.3
19.0	1280 x 1024, SXGA	5:4	22.3	27.3
21.5	1920 x 1080, FHD	16:9	27.4	32.4
24			21.0	26.2

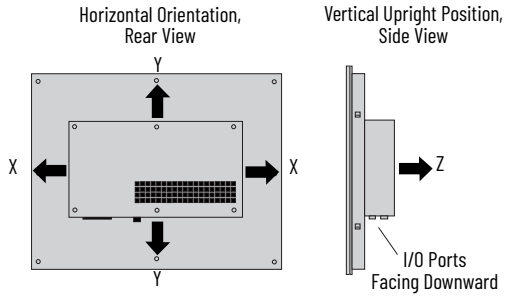
(1) Add 2.5 W of power consumption for any USB port that is used.

Mounting Requirements

Follow these requirements to mount your panel monitor.

- Choose a suitable mounting height.
- For optimal performance, mount your panel PC horizontally in a 0° vertical (upright) position with the I/O ports facing downward as shown in Table 9.
- For hazardous locations, mount in the horizontal orientation and vertical (upright) position with the I/O ports facing down Table 9.
- To help prevent overheating and to provide access to the I/O ports for cable connections, provide minimum clearances as shown in Table 9 around the perimeter of the outer frame and the back of the chassis.

Table 9 - Minimum Clearance and Positioning



Dimension Letter	Minimum Clearance
X	7 cm (2.75 in.)
Y	10 cm (3.94 in.)
Z	7 cm (2.75 in.)

Panel Cutout Requirements

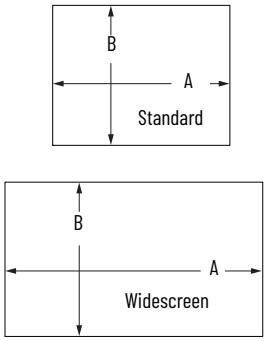
Follow these requirements to for the panel cutout.

- Disconnect all electrical power before you make the cutout.
- The mounting surface material must be 2...6 mm (0.08...0.24 in.) thick.
- For a uniform gasket seal, the roughness of the panel surface must not exceed 120 microns (Rz 120).
- Verify that the area around the panel is clear of obstructions.

- The panel cutout area is dependent upon the display size and format of your 6300M DC powered panel monitor.

Table 10 - Panel Cutout Dimensions [mm (in.)]

Panel Cutout Area



Display Size	Format (1)	Dimension [mm (in.)] (2)	
		Dimension A	Dimension B
12.1	Standard	315 (12.4)	250 (9.84)
12.1	Widescreen	301 (11.8)	203 (7.99)
15	Standard	370 (14.57)	295 (11.61)
15.6	Widescreen	388 (15.28)	238 (9.37)
17	Standard	435 (17.13)	335 (13.19)
18.5	Widescreen	453 (17.83)	274 (10.79)
19	Standard	470 (18.5)	368 (14.49)
21.5	Widescreen	520 (20.47)	312 (12.28)
24	Widescreen	577 (22.71)	344 (13.54)

(1) Standard format is offered with an analog resistive touch screen. Widescreen format is offered with analog resistive and projective capacitive (PCAP) touch screens.
(2) All dimensions are ± 1 mm (0.04 in.).

Required Tools and Hardware

The following tools and hardware are required to install and connect your panel PC.

Required Tools and Hardware
• For ASEM DC powered panel monitors: a DC power supply per DC Power Supply Requirements on page 15 • For ASEM AC powered panel monitors: a three-prong, three-slot AC power cord that is rated IEC-320-C13
• Cutout tools appropriate for mounting material
• Safety glasses
• Torque limiting screwdriver with 1.5 mm hex key bit
• Wire stripper, cutter, and crimper tool
• Small screwdriver
• Adjustable torque screwdriver with M2 and M3 flat-blade screw bits
• Various peripheral cables (see Peripheral Connections on page 10 for required cable ratings and cable types)

Notes:

Installation

Prepare the Panel Cutout

1. Disconnect all electrical power before you make the cutout.
2. Be sure you are complying with all actions that are listed in both Panel Cutout Requirements on page 16 and Mounting Requirements on page 16.
3. Cut an opening in the mounting material according to the dimensions specified for your model shown in Table 10 on page 17.
4. Clean the panel area of all debris and metal fragments.

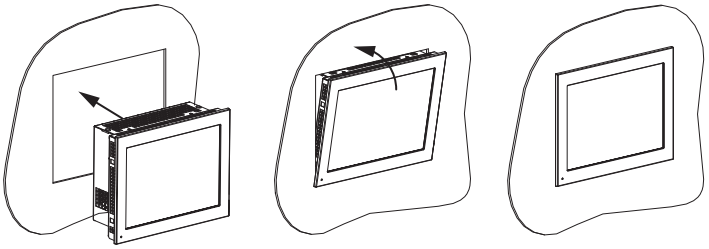
Install the Panel Monitor

To ease installation, two people should install the panel monitor; one person to hold it in place and the other to install the mounting clips.

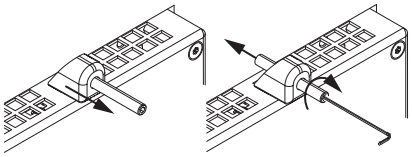
1. Make sure that the sealing gasket is positioned properly on the panel monitor.

IMPORTANT All monitors have a gasket that forms a compression-type seal. Do not use sealing compounds.

2. From the front of the panel, insert the panel monitor into the cutout as shown.

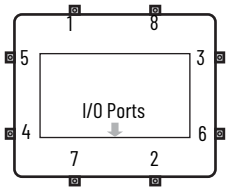


3. Slide the mounting clips into the holes on all four sides of the monitor as shown.

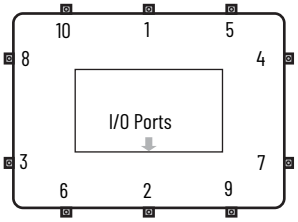


4. Use a hex key to tighten the mounting clips according to the sequence shown.

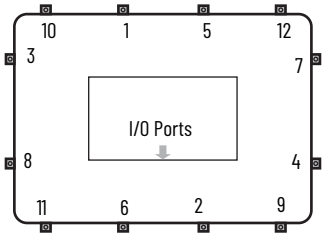
12.1, 15, and 17-in. Display Sizes



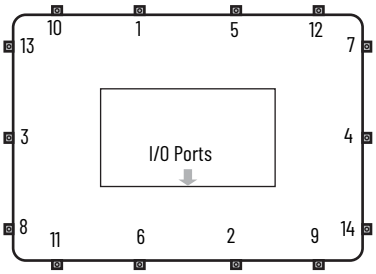
15.6 and 19-in. Display Sizes



18.5-in. Display Size



21.5 and 24-in. Display Sizes



5. Use a torque limiting screwdriver and 1.5 mm hex key bit, tighten the mounting clips to a torque of 0.2 N•m (1.8 lb•in) in the tighten sequence performed in step 4.

IMPORTANT The mounting clips must be tightened to a torque of 0.2 N•m (1.8 lb•in). Doing so provides a proper seal and to help prevent product damage. Allen-Bradley® assumes no responsibility for water or chemical damage to the monitor or other equipment within the enclosure because of improper installation.

6. Repeat step 8 at least three times until all mounting clips are torqued to 0.2 N•m (1.8 lb•in).
7. Verify that the gasket is compressed uniformly against the panel.

   If the gasket is not compressed uniformly: loosen the mounting clips by tightening sequence, then repeat steps 5...7.

Connect the Peripheral Cables

IMPORTANT Before connecting or disconnecting peripheral cables from I/O ports, verify that you are in a non-hazardous location before you connect or disconnect any peripheral connections.
For ASEM 6300M panel monitors with a USB port on the front bezel: This USB port is not for use in hazardous locations. Only use the front USB port for installation and maintenance purposes.

1. Connect peripheral cables to the appropriate I/O ports of your panel monitor. See Table 2 on page 10 for I/O port locations.
2. See the installation guides and user manuals for other components to properly connect the free end of the peripheral cables.

To ease future disconnection and reconnection of peripheral cables, label each peripheral cable with its panel monitor I/O port location.

Grounding and Bonding

Whenever two connected pieces of equipment are far apart, it is possible that their ground connections could be at a different potential level.

To overcome possible grounding problems, the following bonding methods are recommended:

- Bonding method 1: Connect the data cable shields to the equipotential bonding rail on both sides before connecting the cable to the interfaces.
- Bonding method 2: Use an equipotential bonding cable (16 mm^2 or AWG 6) to connect the grounds between your panel monitor and ASEM 6300P panel PC.

Install the Ground Wire

To install the ground wire, perform the following steps.

1. Turn off the main power switch or breaker.
2. Remove the ground screw, eyelet terminal, and washers from the bottom of your panel monitor. See Table 2 on page 10 for the ground screw location.
3. For earth ground, install a grounding wire to the eyelet terminal.
   a. Use a 2.5 mm^2 (14 AWG) or larger external wire to the eyelet terminal. Use a grounding wire with an insulation color that is approved by local inspection authority.
   b. Strip 5 mm (0.20 in.) from the covering at the end of the grounding wire.
   c. Insert the stripped end of the grounding wire into the open end of the eyelet terminal, and crimp it securely to the wire.
4. Reinstall the eyelet terminal and washers to the ground screw in the sequence shown.

Sequence No.	Description
1	Toothed washer
2	Eyelet terminal
3	Washer
4	Lock washer
5	Ground Screw

5. Tighten the ground screw to the monitor chassis.

Connect Power

For DC Powered Panel Monitors

WARNING: Explosion Hazard. For monitors that are used in hazardous locations: Do not connect or disconnect when energized.

To maintain the product certifications, all ASEM 6300M DC powered panel monitors require a safety extra low voltage (SELV) power supply. The power supply is internally protected against reverse polarity. To minimize ground loop currents and noise, Allen-Bradley recommends that DC powered panel monitors use only one grounded connection.

The DC power connector assembly that is shipped with your ASEM 6300M DC powered panel monitor must be assembled. This connector assembly provides strain relief for the DC power wires by reducing their movement. To assemble, wire, and install the DC power connector assembly onto your panel monitor, perform the following steps.

IMPORTANT Verify that you are in a non-hazardous location before you connect or disconnect any power connection

Figure 1 - DC Power Connector Assembly

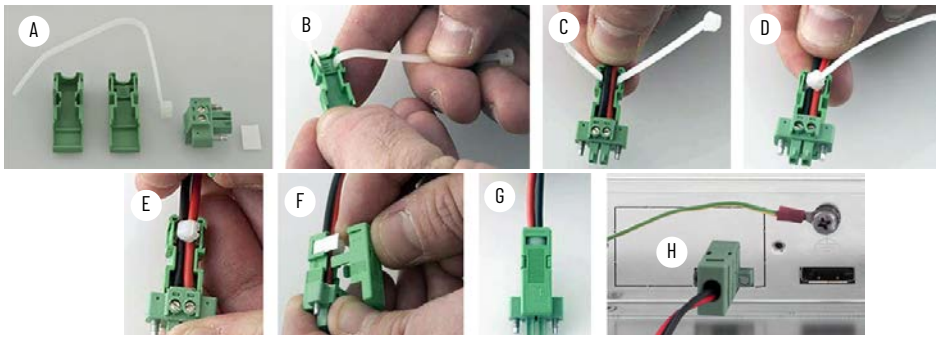
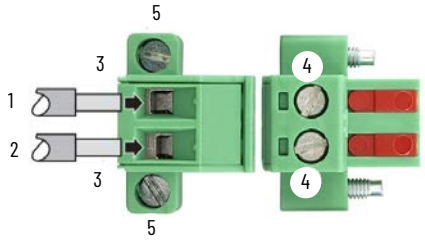


Table 11 - DC Terminal Block Assembly



Note No.	Description	Value
1	DC+ (24V DC nominal) recommended power wire size	2.5 mm^2 (14 AWG)
2	DC- (0V DC) recommended power wire size	
3	Stripped wire length	7 mm (0.275 in.)
4	Torque range to secure DC power wires	0.5...0.6 N•m (0.37...0.4 lb•ft)
5	Torque value to install DC terminal block to product	0.3 N•m (0.22 lb•ft)

1. Lay out the DC power connector assembly kit (A of Figure 1).
2. Insert the cable tie through the slots of the appropriate connector half (B of Figure 1)..
3. Verify that the stripped ends of each DC power wire is 7 mm (0.275 in.). If necessary, adjust the stripped length.

IMPORTANT DC power wires must be of stranded copper and certified for at least 85 °C (185 °F) operation.

4. Insert each stripped end into the DC terminal block as shown in Table 11.
5. Tighten the screws on top of the terminal block assembly to the torque value listed in Table 11.
6. Slide the connector half with the attached tie onto the end of the DC terminal block (C of Table 11).
7. Tighten the cable tie so it is snug against the terminal wires.
8. Use cutting pliers to cut the excess part of the cable tie (D of Figure 1).
9. Install the white label supplied with the kit (E of Figure 1).

The white label can be used for identification or other information.

10. Align and install the other connector clamp half to complete the assembly (F of Figure 1).
11. When it is installed correctly, both tabs of the clamp half lock into place (G of Figure 1).
12. Connect the DC terminal block with the connector assembly to the chassis of your panel monitor (H of Figure 1).
13. Torque the DC terminal block flange screws to the values in Table 11.
14. Connect the power to your DC powered panel monitor.

The light-emitting diode (LEDs) status indicator on the front bezel illuminates and LED status indicators on the underside of the panel monitor illuminate.

See LED Status Indicators and OSD Buttons on page 35 for LED status indicator definitions.

For AC Powered Panel Monitors

All ASEM 6300M AC powered models are designed for use in an industrial or control room environment that uses some form of power isolation from the public, low voltage ma

To connect AC power to your ASEM 6300M AC powered panel monitor, perform the following steps.

1. Be sure the power switch on the underside of your panel monitor is set to 'off'.
2. Connect the appropriate end of an AC power cord (not supplied) to the power input port on your panel monitor.

3. Connect the other end of the power cable to an AC power source with an input voltage of 100...240V AC, 50/60 Hz.
4. Flip the power switch on the panel monitor to 'on'.

   The light-emitting diode (LEDs) status indicator on the front bezel illuminates and LED status indicators on the underside of the panel monitor illuminate.

See LED Status Indicators and OSD Buttons on page 35 for LED status indicator definitions.

Notes:

Configuration

Follow these guidelines and procedures to help you check and change the display resolution and access and configure the on-screen display (OSD) for your ASEM™ 6300M panel monitor.

Set the Panel Monitor Type

Your ASEM 6300M panel monitor uses a (digital) flat-panel display. When driven by an analog VGA interface, your panel monitor is connected as an analog device. As a result, some setup screens can indicate that your panel monitor is operating as an analog device, rather than as a digital or flat-panel device.

If you are using a Microsoft Windows® Plug and Play (PnP) operating system (OS):
Your PC automatically detects the connected monitor type during the startup process. Setting the panel monitor type is not necessary.

If the video card installed in your PC does not support PnP, you must set the monitor type manually. To configure your monitor type:

1. Enable your video card through your OS.
2. Adjust the brightness and contrast that is described in Adjust the On-screen Display on page 28.

Display Resolution Value

Flat-panel monitors are fixed-resolution devices. The image looks best when the panel monitor operates at its recommended resolution. Recommended resolutions depend on the catalog number of your panel monitor. For recommended resolutions, see the resolution value for your particular catalog number in Table 1 on page 8.

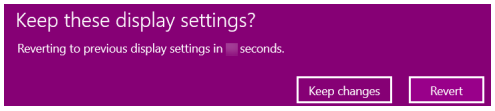
Flat-panel monitors also have advanced scaling capabilities to make the display look as good as possible while in another resolution value. If you switch the recommended resolution to another resolution value, the display can appear slightly distorted due to the replication techniques used to fill the full screen with an image.

To verify the display resolution or to change the display resolution, follow these steps:

From the Microsoft Windows OS desktop:

1. Navigate to Settings > Display.
2. Scroll down to 'Display resolution' within 'Scale and Layout' section.
3. Verify the 'Display resolution' pull-down is the '(Recommended)' selection.

4. To change the recommended display resolution to another resolution value:
   a. Choose another selection from the pull-down list.
      The view refreshes and a popup window appears.



   b. Select 'Keep resolution' or 'Revert' to reset back to the inherent resolution.
5. Close the Settings window at the top-right corner of the screen.

Calibrate the Touch Screen

Touch Screen Precautions

WARNING: The LCD touch screen can be difficult to read and use of this screen could result in a potentially hazardous outcome. Do not use the LCD touch screen under these circumstances:
- The LCD screen darkens.
- The backlight is not functioning properly.

WARNING: You must provide means to achieve a safe state during anomalies and to help achieve that the system has adequate redundancy for critical functions. Failure to follow these instructions can result in death, serious injury, or equipment damage.

WARNING: The design of your system must take into account the possibility of the LCD touch screen losing functionality and not being able to be used to maintain or change control of your system. The touch screen cannot be the single point of control of critical functions and is not intended to replace an E-stop.

The design of your system should follow all applicable code and good engineering practice. Factors to consider in the design of your system include but are not limited to the following:
- The possibility of an unreadable LCD touch screen.
- The possibility of an inoperable LCD touch screen.
- Unexpected communication errors or delays.
- Operator error in the control of the system.
- Proper use of E-stops and other safety practices.

Field Calibration

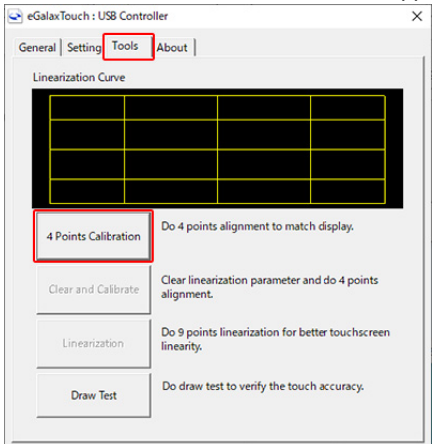
ASEM 6300M panel monitors with an analog resistive touch screen use an eGalaxTouch driver that can be field calibrated.

ASEM 6300M panel monitors with PCAP touch screens use the inherent Microsoft Windows Human Interface Device (HID) driver and cannot be field calibrated.

To field calibrate your ASEM 6300M panel monitor with an analog resistive touch screen, perform the following steps.

1. Access the e-GalaxTouch driver software from the PC connected to your panel monitor.

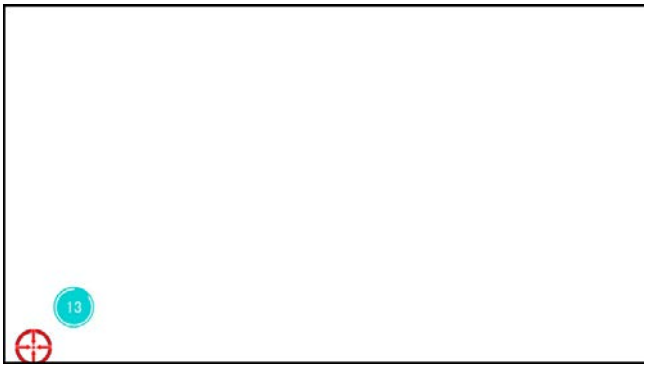
   The eGalaxTouch: USB Controller menu appears.



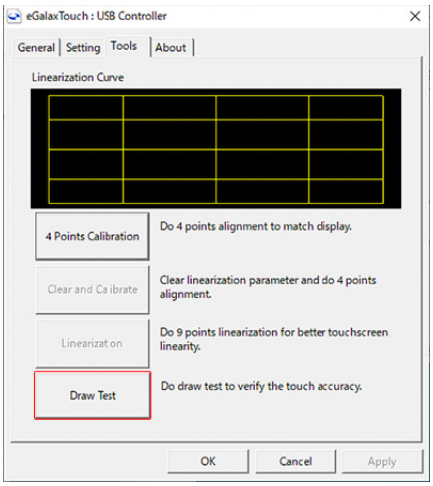
2. Press the 'Tools' tab.
3. Press '4 Points Calibration' from the 'Tools' tab.

   A white screen appears with a red circle and cross-hairs in one of the corners.
4. Press and hold a finger in the center of the red circle.

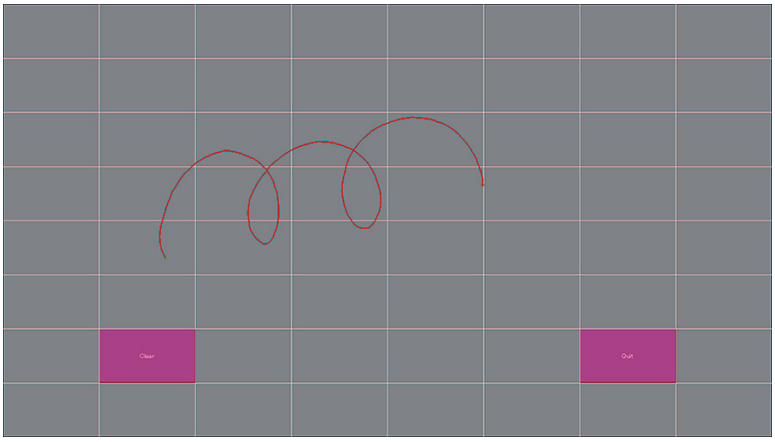
Keep your finger pressed until the counter reaches 100.



5. Repeat step 4 for the other three red circles as they appear in each corner of the screen. A confirmation box appears when the calibration is complete.
6. Press 'OK'.
7. On Tools, press 'Draw Test'.



8. Use your finger to draw on the screen to verify that the touch screen is calibrated correctly.



9. Press 'Clear' to delete what was drawn.
10. Press 'Quit'.
11. Press 'Apply' from the Tools tab to save your changes.
12. Press 'OK' to close the eGalaxTouch driver software.

Adjust the On-screen Display

Your ASEM 6300M panel monitor features an on-screen display (OSD) menu that allows you to you to change various display settings to accommodate your installation site.

OSD Buttons

To navigate within the on-screen menu, use the buttons that are located on the underside of your ASEM 6300M panel monitor.

Table 12 - OSD Buttons

Underside View

Note No.	Description	Function
1	+ (<–)	Increase the value of the selected control or selects the next menu item.
2	- (–>)	Decreases the value of the selected menu item or selects the previous menu item.
3	Menu/Select	Push once to enter the main menu Push a second time to select a highlighted menu option, which can prompt a submenu Push a third time to exit from the current menu (back option)
4	ESC (Exit)	Exits the menu.

OSD Menu Options

The following options with respective descriptions are available within the OSD menu:

Table 13 - OSD Menu Options

OSD Menu	Item	Description
Brightness/ Contrast	Brightness	Set the value from 1 to 100
	Contrast	Set the value from 1 to 100
	DCR	Set the DCR (dynamic contrast ratio) to 'on' or 'off
Color Settings	Color Temperature	Default value: 5700K
	Red	Set the value from 1 to 100; default value: 50
	Green	Set the value from 1 to 100; default value: 50
	Blue	Set the value from 1 to 100; default value: 50
Input Source	Auto select	The best active input source is automatically selected; default is 'on'
	DVI	Select which port is for DVI input; only available if 'Auto select' is set to 'off'
	DisplayPort	Select which port is for DisplayPort input; only available if 'Auto select' is set to 'off'
Display Settings	Gamma	Adjust the gamma of the monitor; default value: 'off (2.2)'
	H. Position	Adjust the horizontal position of the monitor value from 1 to 100; default value: 50
	V. Position	Adjust the vertical position of the monitor from 1 to 100; default value: 50
	Clock	Adjust the time for a specific time zone or for daylight savings time
	Phase	Adjust the signal timing of the panel monitor to match that of the graphics card
	Aspect ratio	Resize the aspect ratio so that any image fits or fills the display screen
Other Settings	OSD transparency	Adjust the opaqueness of the OSD menu background
	OSD H. Position	Adjust the OSD H. (horizontal) position of the monitor from 1 to 100; default value: 50
	OSD V. Position	Adjust the OSD V. (vertical) position of the monitor from 1 to 100; default: 50
	OSD timeout	Adjust the OSD timeout from 1 to 100; default value: 100
	OSD rotation	Rotate the OSD orientation between portrait and landscape views; default value: landscape.
	Factory reset	Reset all settings to the factory default values
Information	Resolution	Displays current setting of each item
	H. frequency	
	V. frequency	
	V. total	

Adjust the OSD Settings

To adjust the on-screen display settings, follow the steps below.

See Table 12 on page 28 for button locations and their function.
See Table 13 on page 28 for available items and default values within the OSD menu.

1. Press the 'Menu/select' button on the underside, far right of your panel monitor.
   The OSD menu appears on the display with 'Brightness/Contrast' as the active selection.

   Settings within the selected settings menu activate in the second column.
   Current values for each setting are shown within the third column.
2. Press the 'Menu/select' button to navigate to the next menu in the far left column.
3. Press the '+ (<-)' button to decrease or the '(->+)' button to decrease the values within the current menu. See Table 13 on page 28 for setting definitions and default values.
4. Repeat steps 2 and 3 as needed.
5. Press the 'Exit' button to exit the OSD menu.

Notes:

Maintenance

Clean Panel Monitor Surfaces

For optimal performance, it is important to periodically clean the surfaces of your ASEM™ 6300M panel monitor.

ATTENTION: Before cleaning any surface of your ASEM 6300M panel monitor, disconnect power from the panel monitor at the power source. Disconnecting power eliminates touch screen objects from activating during equipment washdowns.

Required Cleaning Supplies

The following cleaning supplies are required to clean the touch screen and surfaces of your panel monitor.

ATTENTION: Do not perform a scrubbing action or use abrasive supplies (such as abrasive brushes), abrasive cleansers, abrasive solvents, or high-pressure washes on your panel monitor. Scrubbing and abrasive supplies can damage the touch screen and surfaces of your panel monitor.

ATTENTION: When selecting a mild soap, read the product description label of the mild soap. Be sure it is safe to apply on the product materials of your panel monitor.

Table 14 - Required Cleaning Supplies

Required Cleaning Supplies
Clean, dry, non-abrasive cloths (such as a microfiber cleaning cloths)
Chamois or clean cellulose sponges
Vacuum
Mild, non-abrasive soap
Isopropyl alcohol

Disconnect Power

1. Disconnect power from the monitor at the power source to eliminate touch screen objects from activating when cleaning the surfaces of your panel monitor.
2. Disconnect all peripheral cables from your panel monitor.

Before disconnecting the peripheral cables, label each peripheral cable with its panel monitor I/O port location.

Clean the Touch Screen

To clean the touch screen:

1. Perform both steps in Disconnect Power on page 31.
2. Use a clean, dry, non-abrasive cloth (such as a microfiber cloth) to gently wipe away loose dirt or smudges.
3. If further cleaning is needed:
   a. Dampen a clean, dry, non-abrasive cloth with a commercially available product approved for touch screen surfaces.
4. Dry the display with a chamois or moist cellulose sponge to avoid water spots.

Clean the Exterior Surfaces

1. Perform both steps in Disconnect Power on page 31.
2. For vent holes:

   Vacuum dust and debris from all vent holes on the display and monitor chassis.
3. For all other exterior surfaces:
   a. Apply a mild soap to a clean sponge or a clean, soft, damp cloth.
   b. Gently wipe the surfaces of your panel monitor.
   c. Dampen another clean, soft, cloth with water.
   d. Gently wipe the surfaces of your panel monitor again.
   e. Dry the display with a chamois or moist cellulose sponge to avoid water spots.

Clean the Bezel

If your panel monitor is mounted properly in IP66 enclosures, perform the following steps to remove paint, grease, and residue from the bezel.

1. Perform both steps in Disconnect Power on page 31.
2. To remove paint and grease:
   a. Dampen a clean, soft cloth with isopropyl alcohol.
   b. Gently wipe away any paint splashes or grease from the bezel.

   ATTENTION: Do not allow the isopropyl alcohol to come into contact with equipment labels. Contact with isopropyl alcohol can cause the print on the label to smear.

   c. Dry the display with a chamois or moist cellulose sponge to avoid water spots.
3. To remove residue:
   a. Apply a mild soap to a clean sponge or a clean, soft, damp cloth.
   b. Gently wipe the surfaces of your panel monitor.
   c. Dampen another clean, soft, cloth with water.
   d. Gently wipe the surfaces of your panel monitor again.
   e. Dry the display with a chamois or moist cellulose sponge to avoid water spots.

Reconnect Power

1. Reconnect all peripheral cables from your panel monitor.
2. Reconnect power from the monitor at the power source.

Shipping or Transporting

IMPORTANT Do not ship or transport the monitor when it is installed in a machine, panel, or rack. To avoid damage to the monitor, you must uninstall the monitor and place it in its original packing material before you ship it. Allen Bradley is not responsible for damage to a monitor that is shipped or transported while installed in a machine, panel, or rack.

To ship your panel monitor via common carrier or transport your panel monitor to another location for service or any other reason:

1. Disconnect power from the monitor at the power source. This eliminates touch screen objects from activating when cleaning the surfaces of your panel monitor.
2. Disconnect all peripheral cables from your panel monitor.
3. Remove the panel monitor from its machine, panel, enclosure, or rack.
4. Place your panel monitor in its original packing material.

Dispose of the Panel Monitor

At the end of its life, collect the panel monitor separately from any unsorted municipal waste.

You cannot dispose of panel monitor equipment like other waste material. Most computers and panel monitors contain heavy metals that can contaminate the earth. Therefore, check with local health and sanitation agencies for ways to dispose monitor equipment safely.

Notes:

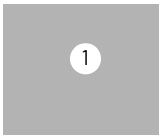
Troubleshooting

LED Status Indicators and OSD Buttons

When your ASEM™ 6300M panel monitor is powered on, various LED (light-emitting diode) status indicators illuminate on the front bezel and on the underside of the chassis. Use these LED status indicators to oversee the current state of and troubleshoot your panel monitor. Use the OSD (on-screen display) buttons, to reset any states and navigate within menus.

Table 15 - Standard Panel Monitors

Front Bezel, Bottom Left



Underside View

LED Status Indicators			
Note No.	**Description**	**Color**	**Function**
1	Video Signal	Green	Correct video signal input
		Yellow	No video signal
OSD Buttons			
Note No.	**Description**		**Function**
2	+ (<–)		Increase the value of the selected control or selects the next menu item.
3	- (–>)		Decreases the value of the selected menu item or selects the previous menu item.
4	Menu/Select		Push once to enter the main menu Push a second time to select a highlighted menu option, which can prompt a submenu Push a third time to exit from the current menu (back option)
5	ESC (Exit)		Exits the menu.

Table 16 - Long-Distance Panel Monitors

Front Bezel, Bottom Left

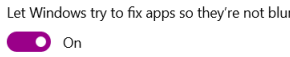
Underside View

LED Status Indicators			
Note No.	**Description**	**Color**	**Function**
1	Video Signal	Green	Correct video signal input
		Yellow	No video signal
2	Link	Green	The panel monitor is linked to a remote, RVL capable remote PC
3	Video	Flashing Yellow	The panel monitor is receiving streaming video from the remote PC
4	Run	Flashing Green	The remote PC is operating correctly
5	Power	Green	The RVL port is operating correctly
Buttons			
Note No.	**Description**		**Function**
6	+ (<–)		Increase the value of the selected control or selects the next menu item
7	- (–>)		Decreases the value of the selected menu item or selects the previous menu item
8	Menu/Select		Push once to enter the main menu Push a second time to select a highlighted menu option, which can prompt a submenu Push a third time to exit from current menu (back option)
9	ESC (Exit)		Exits the menu

Troubleshooting Table

The troubleshooting table below lists typical symptoms and possible actions to correct problems that you can encounter when you use your ASEM 6300M panel monitor.

Table 17 - Troubleshooting Table

Symptom	Action
No signal message	Check the video cable connection between the panel monitor and PC.
Screen is blank	The video mode could be out of range. Change to the recommended resolution; see Picture is not clear action.
	Disable the screen saver on your PC.
	Verify that the power cord is connected to your panel monitor.
	Test the wall outlet by plugging in a properly functioning device.
	Replace the suspected faulty cable or power cord on your panel monitor.
	Have the panel monitor serviced.
Out of range message	Check the maximum resolution and the frequency on the video port of your PC.
Picture is scrambled	The video mode could be out of range. Change to the recommended resolution as described in the Picture is not clear action.
	Check the video cable connection between your panel monitor and PC.
	Check the maximum resolution and the frequency of the video (DVI-D) port on your PC.
Picture is not clear	Verify that the display resolution is set to '(Recommended)' and the refresh rate is set correctly. From the Microsoft Windows® OS desktop: 1. Navigate to Settings > Display. 2. Scroll down to 'Display resolution' within 'Scale and Layout'. 3. Verify the 'Display resolution' pull-down is the '(Recommended)' selection. In this example, '1920 x 1080 (Recommended)' is selected.  4. Change the pull-down selection if '(Recommended)' was not the current selection. 5. Choose 'Keep selection' within the popup window. 6. Scroll down to and click the 'Advanced display settings'. 7. Confirm the refresh rate and adjust as necessary. 8. Close the Settings window.
	Check the video cable connection between the panel monitor and the PC.
	Minimize unnecessary accessories such as video extension cables.
Applications appear blurry	Verify that the application scaling is set. From the Microsoft Windows OS desktop: 1. Navigate to Settings > Display. 2. Scroll down to 'Scale and layout'. 3. Select 'Advanced scaling settings'. 4. Verify that 'Let Windows try to fix apps so they're not blurry' is set to 'On'.  5. Change the setting to 'On' if it was not the current selection. 6. Close the settings window.
Image is not stable	The video mode could be out of range. Change to the recommended resolution as described in the Picture is not clear action.
	Check for proper video cable installation. Replace the suspected faulty cable.
Screen jitter or noisy video	The video mode could be out of range. Change to the recommended resolution as described in the Picture is not clear action.
	Check for proper video cable installation. Replace the suspected faulty cable.
	Reroute the cables or replace suspected faulty cables.
	Check the host PC and panel monitor grounding.

Notes:

Rockwell Automation Support

Use these resources to access support information.

Technical Support Center	Find help with how-to videos, FAQs, chat, user forums, Knowledgebase, and product notification updates.	rok.auto/support
Local Technical Support Phone Numbers	Locate the telephone number for your country.	rok.auto/phonesupport
Technical Documentation Center	Quickly access and download technical specifications, installation instructions, and user manuals.	rok.auto/techdocs
Literature Library	Find installation instructions, manuals, brochures, and technical data publications.	rok.auto/literature
Product Compatibility and Download Center (PCDC)	Download firmware, associated files (such as AOP, EDS, and DTM), and access product release notes.	rok.auto/pcdc

Documentation Feedback

Your comments help us serve your documentation needs better. If you have any suggestions on how to improve our content, complete the form at rok.auto/docfeedback.

Waste Electrical and Electronic Equipment (WEEE)

At the end of life, this equipment should be collected separately from any unsorted municipal waste.

Rockwell Automation maintains current product environmental compliance information on its website at rok.auto/pec.

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